TRANSACTIONS
OF THE
NEW YORK SURGICAL SOCIETY.

Stated Meeting, November 25, 1903.

The President, Howard Lilienthal, M.D., in the Chair

SEVERE ELECTRIC BURN OF SKULL AND HANDS.

Dr. Otto G. T. Kiliani presented a man, an electric lineman by occupation, who inadvertently grasped a live wire that he had been sent to repair. In his desperate attempts to release his right hand, which held the wire, his left wrist also came in contact with it. He then fell, his head striking the trolley-rail, and for ten minutes he lay there unconscious, with a current of 2750 volts passing through his body. After he was rescued he remained unconscious for three hours. The following day, when he was brought to the German Hospital, he was in a semiconscious condition. An examination showed severe burns covering the right palm and fingers, the left wrist, and the right side of the skull. The ring and little finger of the right hand had been completely severed by the contact of the wire. The patient complained of severe pain throughout the entire body, but especially in the head and hands. Two days later his face became enormously swollen; this was only temporary, and was probably due to interference with the lymph currents (not inflammatory). The mental faculties were apparently unimpaired by the strong current of electricity that had traversed the brain for at least ten minutes. Profuse hæmorrhages repeatedly accompanied the dressing of the burns. The bleeding apparently emanated from the veins and arteries in the granulation tissue, and was probably due to decomposition of the vessel walls. As it was impossible to apply a ligature or control the bleeding by compression, it became necessary to dissect out the vessels and follow them for two inches or more before they were found sufficiently sound to permit of the application of a ligature. Some of the bones of the left wrist were so severely burned that they had to be removed. The wound on the skull presented a large section of bone denuded of periosteum; the outer plate was found to be necrotic throughout the entire extent of the burned area, three inches by four, a smaller portion of which was necrotic through the entire thickness of the skull. This necrotic bone, representing an oval disc of three by four inches, could be removed by the elevatorium, leaving the dura exposed to quite an extent. without difficulty. The wound healed by granulation, and was later on covered with skin-grafts by Thiersch's method.

Dr. F. W. Murray said that in a case of severe electric burns affecting the face, arm, and leg which he saw at the New York Hospital, the granulations bled very freely when the wounds were dressed. The case resembled that of Dr. Kiliani's in this particular, but it was never necessary to tie any vessels.

Dr. Lilienthal said the pain throughout the body that the patient complained of after the injury might be explained by the very severe tonic contraction of the muscles during the time that he was in contact with the electric current.

THE TREATMENT OF PULSATING EXOPHTHALMOS.

Dr. F. W. Murray read a paper with the above title, for which see page 421.

Dr. Lilienthal said that in a case of pulsating exophthalmos which he showed several months ago, ligation of both common carotids was followed by temporary improvement, but it did not produce a total disappearance of the symptoms. The patient, a young girl, still complained of buzzing in the head immediately after the second ligation, which was done within a week of the first, although the nose had greatly diminished. The exophthalmos diminished also, but never entirely disappeared, and the symptoms gradually became worse until within a few months something more had to be done. An Omega-shaped flap was then raised in the temporal region, but on endeavoring to make an exploration with the finger the hæmorrhage was so severe that the wound was packed for forty-eight hours; a thorough exploration was then possible, and a pulsating tumor could be distinctly felt underneath the dura. It was not considered advisable to interfere with this tumor. The operation relieved the patient to a considerable extent from the headache from which she was suffering, but it had no effect upon the buzzing and exophthalmos. The flap was put back in place and the soft parts healed by primary union excepting at one point left for drainage. Non-union of the bone still persisted, and the entire flap pulsated.

The cause of the exophthalmos in this case, Dr. Lilienthal said, was apparently an arteriovenous aneurism of obscure origin, probably of the cavernous sinus. The buzzing in the head had existed since childhood. An operation for mastoid disease had been done abroad, but this was after the onset of the other symptoms.

As a further expedient in this case, the speaker suggested the possible advisability of injecting gelatin into one of the enlarged veins about the orbit.

Two other causes of unilateral pulsating exophthalmos were referred to by Dr. Lilienthal, namely, a soft sarcoma of the globe and of the orbit. He considered the condition a rather hopeless one at best.

Dr. Murray said that in the case mentioned by Dr. Lilienthal he would be inclined to expose the large and tortuous veins about the orbit and tie them off. That failing, he would ligate the internal carotids. He had no experience with the injection of gelatin into the enlarged veins, but in a number of cases where this injection of substances causing coagulation had been resorted to bad results had followed. As to the other causes of pulsating exophthalmos mentioned by Dr. Lilienthal, the speaker said that those cases had been classed by Slomann as false pulsating exophthalmos. In these the vein was not affected, and they did not give all the symptoms that were present in the true variety.

VESICAL CALCULI FOLLOWING SUPRAPUBIC PROSTATECTOMY.

Dr. Lilienthal presented a calculus removed from the bladder of an old man who was operated on last summer by another surgeon for an enlarged prostate. The operation, a suprapubic prostatectomy, was followed by relief of the retention. The patient soon afterwards developed a cystitis, with great frequency of urination. The urine contained considerable pus and mucus, and the patient suffered so much distress that he again sought relief.

Upon sounding, a calculus was found in the bladder. A suprapubic opening was made through the cicatrix and several calculi removed. Each stone contained a nucleus which at first sight appeared to be a bit of gauze, but upon closer examination, after dissolving the calcareous substance with hydrochloric acid, it proved to be a fragment of tissue, very tenacious, fully half an inch wide and about one-eighth of an inch thick. Upon inquiry, Dr. Lilienthal said he learned that the patient's bladder had not been irrigated after the prostatectomy, although it had been drained.

The case illustrated the importance of thorough and frequent irrigation of the bladder after prostatectomy, particularly after the suprapubic operation.